

FOREIGN EXCHANGE RESERVE COVER
AND STATUTORY LIMITS ON CENTRAL
BANK CREDIT TO CENTRAL GOVERNMENT:
The Need For A Consistent Approach

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At the end of 1983 the Central Bank of Belize foreign reserves cover fell below the required minimum and remained below that minimum throughout 1984 and early 1985. This has led the Bank to examine more closely the reasons for the failure and to review the law in this respect.

This paper outlines the Central Bank of Belize's experience with foreign exchange reserve cover requirements and ceilings on Central Bank credit to Central Government. It is essential that if such requirements are imposed that they should provide a sound and consistent basis for the conduct of monetary policy. Unfortunately, the present law in Belize relating to these requirements has been built-up on a somewhat ad hoc and arbitrary basis. This piecemeal approach has led to problems in the implementation of the various provisions of the Central Bank Act. In particular, the statutory limits on Central Bank credit to Central Government have not taken into full account the impact of credit on the foreign reserves and the minimum foreign reserve cover requirements. This complicates considerably the application of monetary policy and makes policy decision difficult.

The focus of the paper is on the external assets ratio and Central Bank credit to the public sector. A simple monetary model is used to illustrate the link between performance against the statutory external assets ratio and Central Bank credit to Central Government. This link implies that the statutory requirement controlling the level of foreign exchange cover has to be consistent with controls on lending to the public sector if these requirements are to be met.

The Existing Law:

The current legal requirements relating to foreign reserve cover and Central Bank credit to the public sector are summarised below.

External Assets Ratio:

"The Bank shall maintain at all times a reserve of external assets of not less than forty percent of the aggregate amount of notes and coins in circulation and of the Bank's liabilities to customers in respect of its sight and time deposits "[Central Bank Act 1982, Section 25(2)].

Advances to Central Government:

"With a view to offsetting fluctuations between receipts and payments of the Government, the Bank may make direct advances to the Government provided that at any one time the total outstanding amount of such direct advances shall not exceed fifteen percent of the estimated current revenues of the Government for its current financial year "(Central Bank Act, Section 34).

Central Bank Treasury Bill Holdings:

"The Bank shall not at any time hold whether as a result of purchase or as collateral for any of its loans and advances any Treasury bills or securities in accordance with subsection (1) of this section in an aggregate amount exceeding five times the aggregate amount at that time of the paid up capital and General Reserve Fund of the Bank" (Central Bank Act 1982, Section 35(2)].

Relation Between The External Assets Ratio And Net Domestic Credit To
Central Government:

In setting a statutory minimum external assets ratio the Central Bank Act automatically sets an implicit limit on Central Bank credit to Central Government. That is, if approved external assets are to remain above the statutory requirement. This can be appreciated more easily by looking at the Central Bank's balance sheet presented as an identity.

$$FA + NDC = DL + KR \quad (A1)$$

Where

FA = Gross Foreign Assets

NDC = Net Domestic Credit

DL = Total Demand Liabilities

KR = Capital and Reserves

Reserve cover is normally defined as the ratio of foreign assets to total demand liabilities. That is,

$$FA/DL \quad (A2)$$

Where

DL = Currency issue and both domestic and foreign
sight and time deposits.

Assume 100% foreign reserve cover,

$$FA \geq DL \quad (\Lambda 3)$$

Where from (A1),

$$FA = DL + KR - NDC \quad (\Lambda 4)$$

Constraint (A3) implies

$$DL + KR - NDC \geq DL \quad (\Lambda 5)$$

Subtracting DL from both sides of the expression

$$KR - NDC \geq 0 \quad (\Lambda 6)$$

Implying that

$$KR \geq NDC \quad (\Lambda 7)$$

Hence 100% reserve cover imposes the constraint that net domestic credit (NDC) is less than or equal to the total of the Central Bank's Capital and Reserves (net worth).

This result can be extended to the general case where $\alpha\%$ foreign reserve cover is applied.

That is,

$$FA \geq \alpha DL \quad (A3)$$

Where from (A1),

$$FA = DL + KR - NDC \quad (A4)$$

Constraint (A3) implies

$$DL + KR - NDC \geq \alpha DL \quad (A5)$$

$$(1 - \alpha) DL + KR - NDC \geq 0 \quad (A8)$$

$$NDC \leq (1 - \alpha) DL + KR \quad (A9)$$

This says that net domestic credit (NDC) cannot exceed the sum of the Central Bank's capital and reserves and a certain percentage $(1 - \alpha)$ of its total demand liabilities.

A Specific Case:

The Central Bank of Belize Act Section 25(2) states that approved foreign assets be at least forty percent of the total of notes and coins in circulation and the Bank's liabilities in respect of its sight and time deposits.

That is,

$$FA_A \geq \alpha DL$$

(B1)

Where

FA_A = Approved Foreign Assets

α = 0.4

DL = Total foreign and domestic demand liabilities.

In the Central Bank Act domestic demand

liabilities are defined to include public sector deposits.

DC = To be consistent with the provisions of the Act this item is defined as total credit extended to Central Government (Central Bank advances to Central Government and holdings of Government of Belize Treasury bills).

Assume that $FA_A = FA$. That is, $(FA - FA_A)$ is fairly small, likely to be erratic, and can be ignored for purposes of analysis. Net advances to the commercial banks are also assumed to be zero. This is consistent with announced Central Bank Policy.

From the balance sheet identity presented previously, we have

$$FA = DL + KR - DC \quad (B2)$$

Where

Substituting in B1

$$DL + KR - DC \geq 0.4 DL \quad (B3)$$

$$(1 - 0.4) DL + KR - DC \geq 0 \quad (B4)$$

$$DC \leq 0.6 DL + KR \quad (B5)$$

This expression just says that, if the Central Bank is to meet the statutory minimum external assets ratio, its credit to the Central Government cannot exceed the aggregate of its total capital and reserves plus sixty percent of its total foreign and domestic demand liabilities. Put another way, a certain proportion of the Central Bank of Belize funds is earmarked to be held in the form of external assets, thus restricting the funds available to finance Central Government.

This requires us to look at the various constraints on credit to Central Government. The Central Bank's capacity to lend to Central Government is limited by its: -

1. DEMAND LIABILITIES:

If the Central Bank is to meet the external assets ratio it can only lend Central Government sixty percent of its holdings in respect of certain specified liabilities [(1 - 0.4) DL]. These consist of:

(a) Domestic Demand Liabilities:

These are comprised of currency and commercial bank and public sector deposits on demand with the Central Bank of Belize. Public sector expenditure can be financed by printing money and pushing up the currency issue or by raising the commercial banks'

cash reserve requirements. The former course is highly inflationary, while the latter will restrict commercial bank lending to their private customers so that, in effect, lending to the public sector would be "crowding out" the ability of the private sector of the economy to acquire funds.

(b) Foreign Liabilities:

The Central Bank can finance lending to Central Government by borrowing from abroad. Foreign exchange borrowings from the head offices of the multi-national commercial banks is one source of finance. A US\$3 million balance of payments support loan negotiated with the commercial banks in July 1984 and repaid in March 1985 is an example. However, account has to be taken of the impact on the foreign exchange reserves when such short-term liabilities mature and, if the funds are used to finance the Central Government's cash shortfall, this may eventually lower Central Bank net domestic assets. Similar arguments apply to foreign borrowing by the Central Government. An example, is a US\$13 million loan to GOB under the CBI. The foreign currency proceeds are deposited with the Central Bank which has the effect of increasing the foreign exchange reserves. When Government draws from the special account established in the Central Bank for these funds this lowers Central Bank advances to Government.

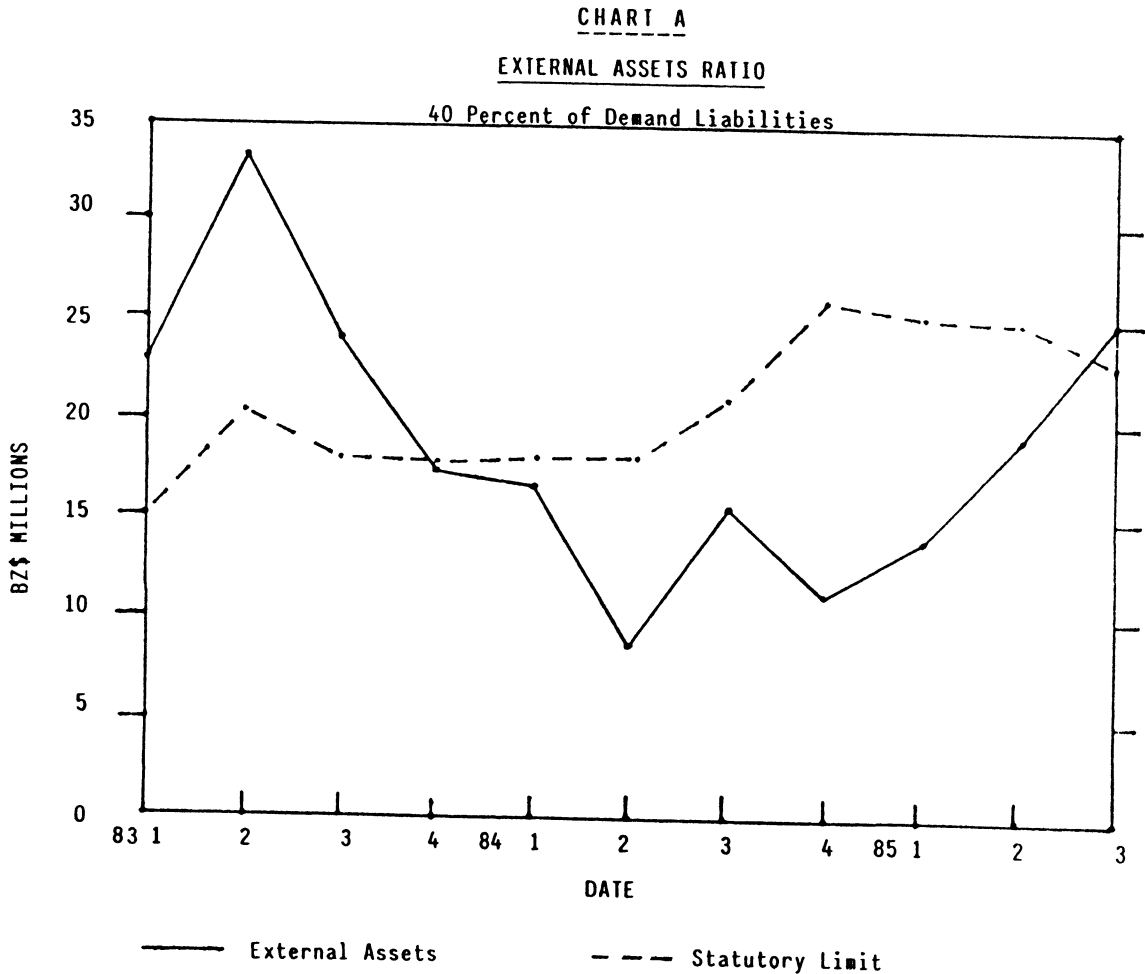
2. CAPITAL AND RESERVES:

If the Central Bank were required to maintain 100 percent foreign reserve cover on its demand liabilities the only way the Bank could increase its resources available to Central Government would be

from an accumulation of enhanced net profits. The percentage of net profits that is paid by the Bank to the Accountant General (for the Consolidated Revenue Fund) is strictly controlled by the Central Bank Act. (Note that if the Central Bank were to run losses, these losses would have to be met from the Consolidated Revenue Fund).

3. PERFORMANCE AGAINST STATUTORY REQUIREMENTS:

Chart A compares the ratio of Central Bank approved external



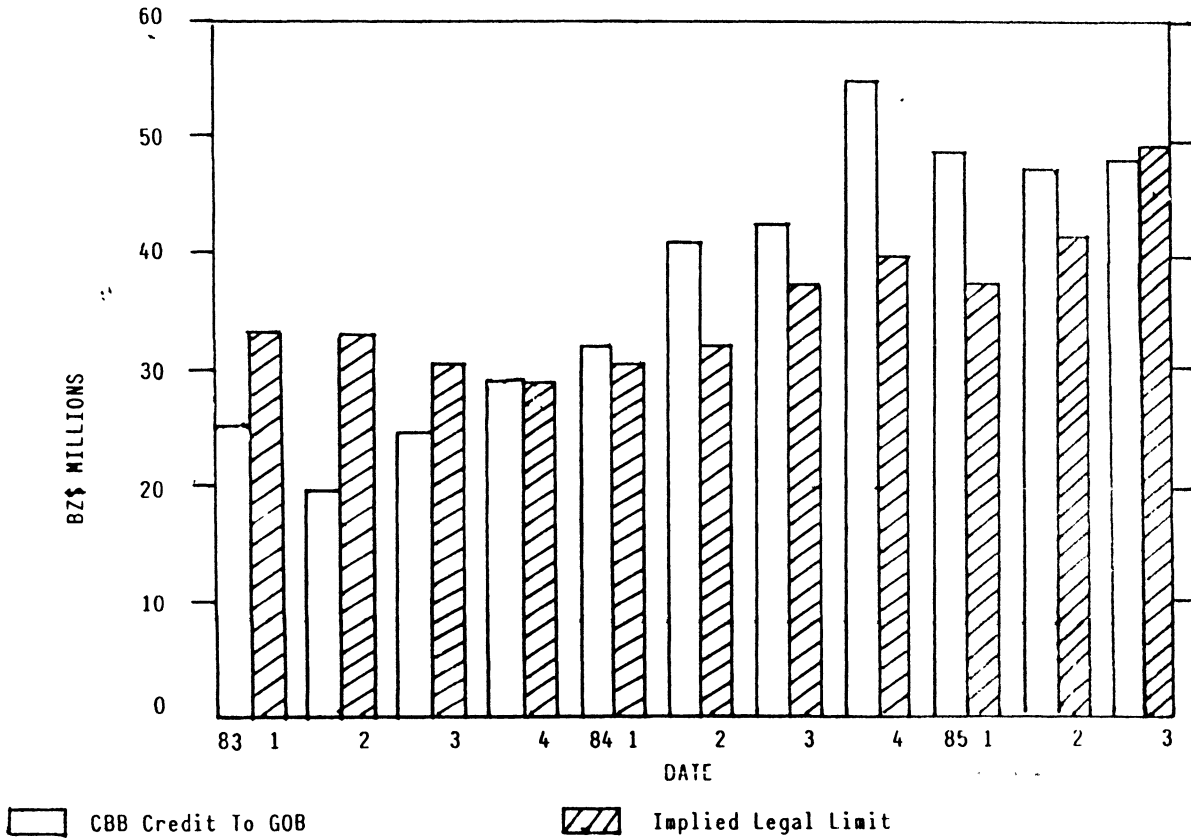
assets to its total demand liabilities with the statutory requirement. During the first three quarters of 1983, approved external assets remained in excess of the required minimum. At the end of 1983, the external assets ratio fell below the statutory requirement and remained below that minimum throughout 1984 and the first half of 1985. Approved foreign assets fell as low as BZ\$8.7 million at the end of June 1984. The position improved somewhat in 1985 due largely to tighter controls on domestic credit imposed in early 1985. At the end of September 1985 approved external assets were \$1.8 million higher than the required minimum.

The ceiling on Central Bank credit to Central Government implied by the statutory minimum external assets ratio has been calculated. The results are compared with total credit extended for the period 1983 to 1985 in Chart B. It should be observed that from the final quarter of 1983, levels of credit to the Government of Belize have been in excess of the implied limit and have not, therefore, been consistent with the achievement of the external assets ratio. Indeed, a casual comparison of Chart A and B shows that the deficiency in the external assets ratio has been related closely to excess levels of Central Bank credit to Central Government. Looking at the second quarter of 1984, for example, it can be seen that a sharp deterioration of the foreign exchange reserves (that was reflected in an external assets ratio of 19 percent) is associated with levels of Central Government financing of some \$10 million in excess of the implied limit.

CHART B

EXTERNAL ASSETS RATIO

Implications For CBB Credit To GOB

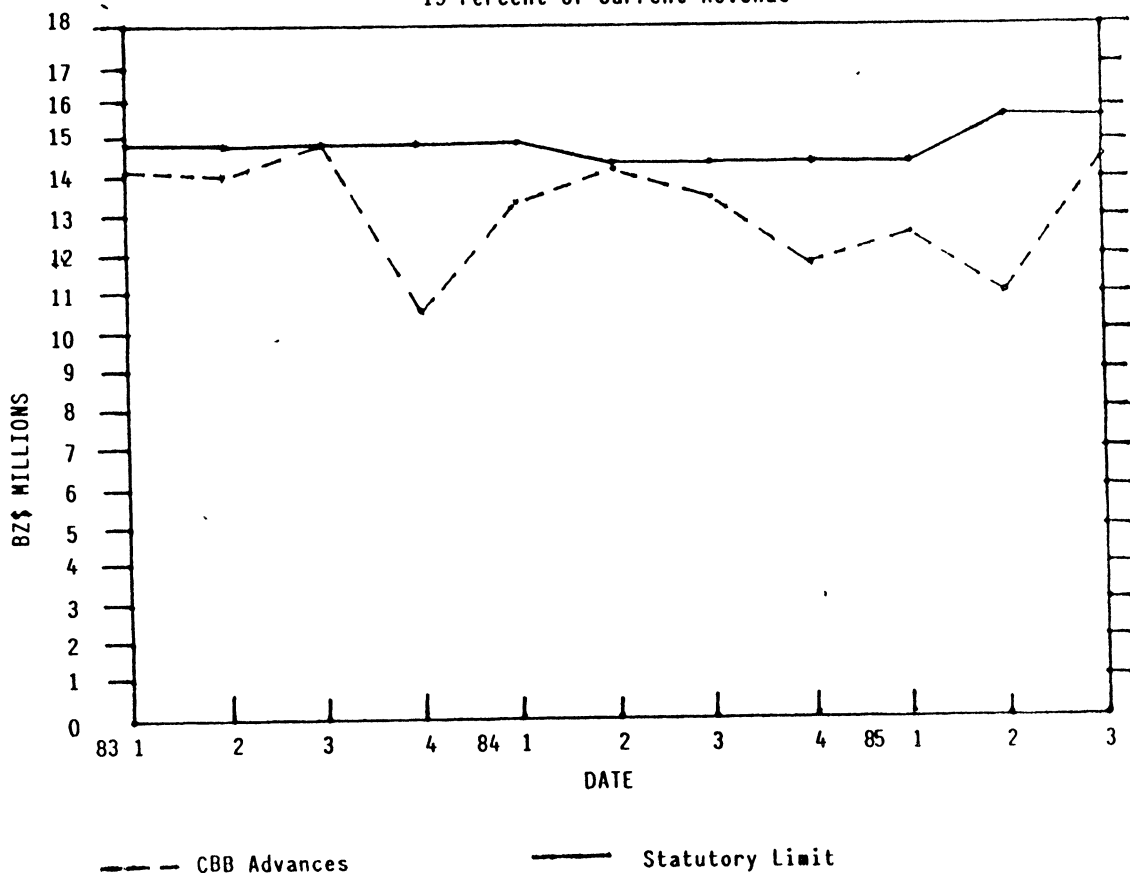


How did Central Bank advances to the Central Government and its Treasury Bill holdings fare compared with the legal maximum set in the Central Bank Act (1982) during this period? The Central Bank Act states that Central Bank advances to Central Government should not exceed 15 percent of estimated current revenue for the current fiscal year. Chart C shows that Central Government advances have remained within the limit set for the period from 1983 through

CHART C

LIMIT ON CBB ADVANCES TO GOB

15 Percent Of Current Revenue



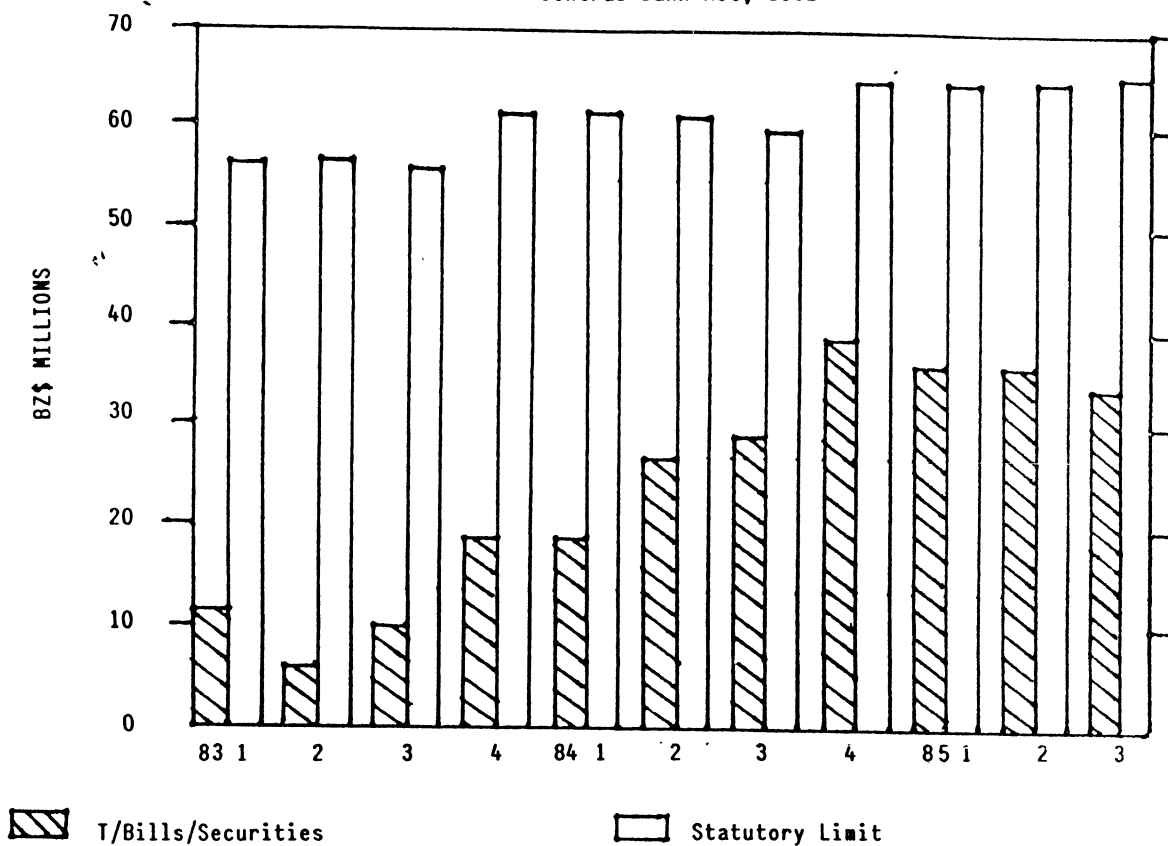
first half 1985. Thus, although from end 1983 credit to Central Government remained below the ceiling set in the Central Bank Act, this level of credit was well in excess of that consistent with the achievement of the statutory minimum foreign reserves ratio.

Chart D compares Central Bank holdings of Treasury bills

CHART D

LIMIT ON T/BILL & SECURITIES HOLDINGS

Central Bank Act, 1982



and other Government of Belize securities with the ceiling set on this aggregate in the Central Bank Act. For the period starting first quarter 1983, Central Bank holdings have remained comfortably within the statutory requirement despite levels of Government financing that have exerted severe pressure on the official foreign exchange reserves.

The above discussion illustrates some of the problems associated with simultaneously imposing limits on foreign reserve cover and credit to Central Government. Statutory requirements do have the advantage of imposing a measure of financial "discipline" on Central Government Operations. However, if such limits are imposed it has to be appreciated that foreign reserve cover requirements will often act as a binding constraint on public sector credit. It is preferable that this constraint be recognised explicitly in the law. That is, if the Central Bank is required to maintain forty percent of its assets in foreign reserves then the law should state that credit to Central Government should not exceed sixty percent of the Central Bank's total assets (after adjusting for the net miscellaneous accounts of the Bank).

Having said this it is questionable as to whether the external assets ratio should be regarded as sacrosanct and "enshrined" in the legislature. On the contrary, the need to maintain a certain level of foreign reserve to satisfy a legal requirement may result in unavailability of freely usable foreign exchange to support normal foreign exchange operations. Indeed, such an attempt may force an unnecessary exchange rate devaluation due to a temporary surge in domestic credit. A successful adjustment programme can be followed without the need to rely on statutory restraints. This will depend on the soundness of the monetary and fiscal policies pursued. These policies should aim to foster economic growth, while at the same time preserving exchange rate, monetary and price stability.

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